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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/247,219 02/10/99 TOMASULA F 862.004US1

IM22/0303

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EXAMINER

DUBOIS, P

ART UNIT

PAPER NUMBER

1761

5

DATE MAILED:

03/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/247,219

Applicant(s)
Tomasula

Examiner
Philip DuBols

Group Art Unit
1761



☒ Responsive to communication(s) filed on Feb 19, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-14 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-14 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomasula (U.S. Patent 5,432,265) in view of Hawley et al (U.S. Patent 3,642,490).

Tomasula teaches a process for continuous removal of solid products from a high pressure system (U.S. Patent 5,432,265, abstract). The process can be used to precipitate proteins. The precipitation process may be used with any reactive gas that lowers or raises the pH and results in solid formation (col. 2, lines 25-35). The process initially establishes a pressure (col. 3, lines 25-30), adds carbon dioxide to the system (col. 3, lines 30-35), heats the product (col. 3, lines 35-40) which further increases the pressure, reduces the pressure placed on the product and then allows the product to exit the process at atmospheric pressure (col. 3, lines 10-16). When the process is completed, the product may be further separated as necessary by conventional means, such as settling, centrifugation, absorption or the like (col. 5, lines 10-15). In

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addition, Tomasula teaches that a holding process may be used to optimize the product (col. 3, lines 60-65). Thus, it would have been obvious to one of ordinary skill in the art to optimize the holding time, pressures and temperatures as the Tomasula teaches that these parameters are result effective variables that can be optimized depending on the type of protein being precipitated (col. 3, lines 40-45)..

Tomasula also teaches that the process may be operated from about 100 psi to about 1500 psi (col. 3, lines 38-42). Tomasula teaches that this pressure effects the gas that is added to the process. Tomasula teaches that increasing the pressure of the carbon dioxide results in an increased production of H^+ which produced carbonic acid thereby lowering the pH and causing coagulation of the protein (col. 1, lines 40-55). Tomasula further teaches that the type of gas and pH of the product can be optimized depending on the protein. It would have been obvious to one of ordinary skill in the art to optimize the pH because the pH is a result effective variable which would be optimized according to the pH at which the desired protein concentration will precipitate.

Although Tomasula teaches that this process can be used on a variety of products including vegetable pieces (col. 4, line 55), Tomasula is silent as to using the process on a vegetable protein product. Hawley et al (U.S. Patent 3,642,490) teaches a bland flavored, vegetable protein food product. The product taught by Hawley applies high pressures and temperatures to obtain a concentrated product. Hawley teaches that it is desirable to raise the pH of the product at or above 7 at the initial stages of processing in order to remove undesired

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components such as sugars and unwanted proteins (U.S. Patent 3,642,490, col. 4, lines 60-70).

Furthermore, Hawley teaches that the final protein concentration can vary depending on the components that are added to the slurry and the type of processing conditions applied to the product (col. 9, lines 45-50).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide Tomasula with a neutralized product at the initial stages of processing because a neutralized product helps remove unwanted components from the product, as taught by Hawley.

Conclusion

3. No claim is allowed.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kellor (U.S. Patent 4,147,810) teaches a vegetable protein product. Kerr et al (U.S. Patent 5,710,365) teaches a soybean product. Spiel (U.S. Patent 5,432,265) teaches a protein product.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip DuBois whose telephone number is (703) 305-0508. The examiner can normally be reached on Monday through Friday from 8:00 to 5:30. The examiner is not in the office the second and fourth Fridays of each month.


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6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Lacey, can be reached on (703)-308-3535. The **fax phone number** for this Group is (703)-305-3602.

7. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Philip A. DuBois

February 28, 2000


MILTON CANO
PRIMARY EXAMINER

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2/28/00